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John J. Timar Wornble Carlyle Sandridge & Rice, PLLC P.O. Box 7037 Atlanta, GA 70357-0037			EXAMINER FISHER, PAUL R	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PAUL J. MILLER and ASIT K. JENA

Appeal 2008-5538
Application 09/687,303
Technology Center 3600

Decided:¹ May 21, 2009

Before HUBERT C. LORIN, ANTON W. FETTING, and
BIBHU R. MOHANTY, *Administrative Patent Judges*.

MOHANTY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

The Appellants seek our review under 35 U.S.C. § 134 of the final rejection of claims 1-27. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

SUMMARY OF THE DECISION

We AFFIRM-IN-PART.

THE INVENTION

The Appellants' claimed invention is directed to a system for automatically pushing flight status information to passengers and their agents whenever an airline flight is delayed, cancelled, or otherwise subject to a status change so the passengers can plan accordingly without having to seek out such information. (Specification 1:27-32). Claim 14, reproduced below, is representative of the subject matter of appeal:

14. A method of automatically notifying airline passengers of airline flight status changes, the method comprising the steps of:
 - receiving passenger reservation information from the airline passengers, the passenger reservation information including a request for automatic flight status change notification information for an airline flight the passenger is reserving;
 - receiving scheduled departure or arrival times of a plurality of airline flights and storing the scheduled departure or arrival times in a computer-readable memory;
 - receiving updated departure or arrival times for the airline flights and storing the updated departure or arrival times in a computer-readable memory;
 - comparing the scheduled departure or arrival times to the updated departure or arrival times; and

automatically pushing flight status change notification information to each passenger on an airline flight who has requested notification information if the updated departure or arrival time for the airline flight varies from the scheduled departure or arrival time for the airline flight by a predetermined amount of time.

THE REJECTIONS

The Examiner relies upon the following as evidence in support of the rejections:

Nelson	US 6,496,568 B1	Dec. 17, 2002
Becker	US 6,591,263	Jul. 8, 2003

Business Editors CTIA Wireless '99, *Schlumberger Demonstrates Unique Value-Added Loyalty Application At CTIA Wireless '99*, Business Wire 1-3 (1999) (hereinafter "Schlumberger").

The following rejections are before us for review:²

1. Claims 1-9, 14-21, 24-25, and 27 are rejected are under 35 U.S.C. § 103(a) under Nelson, Becker, and Schlumberger.

² We note an Appeal Brief was filed on June 27, 2007 and that an Examiner's Answer was filed on October 3, 2007. A Board of Appeals Docketing Notice was mailed on September 4, 2008 at which time jurisdiction passed to the Board of Appeals. Since jurisdiction passed to the Board of Appeals as of the date of September 4, 2008, the subsequent Examiner's Answer with a new grounds of rejection which was mailed on December 9, 2008, the Amendment filed February 2, 2009, and the Final Rejection of April 13, 2009 were not officially be entered since the application was not under the jurisdiction of the Examiner. The Examiner's Answer mailed on December 9, 2008, the Amendment filed February 2, 2009, and the Final Rejection of April 13, 2009 and the issues presented therein are not before us for review since these papers were never officially entered into the application and therefore cannot be considered. (*See* 37 C.F.R. § 41.35 (2008)).

2. Claims 10-13, 22-23, and 26 are rejected under 35 U.S.C. § 103(a) under Becker and Schlumberger³.

THE ISSUE

At issue is whether the Appellants have shown that the Examiner erred in making the aforementioned rejections.

With regards to claims 1-5, 14-19, 24, and 27 this issue turns on whether it would have been obvious to combine the references of Nelson, Becker, and Schlumberger to meet the claimed limitations.

With regards to claims 6-9, 20-21, and 25 this issue turns on whether Nelson discloses receiving and storing in a database scheduled times of departure or arrival for substantially all U.S. airline flights.

With regards to claims 10-13, 22-23, and 26, this issue turns on whether it would have been obvious to combine the references of Becker and Schlumberger to include “queuing the passenger reservation information to a date-ranged queue using the scheduled time of departure or arrival of the flight.”

FINDINGS OF FACT

We find the following enumerated findings of fact (FF) are supported at least by a preponderance of the evidence:⁴

³ We note that the Examiner’s Answer of October 3, 2007 at page 2 notes that the Nelson reference is not used in the rejection of claims 10-13, 22-33 and 26 under 35 U.S.C. § 103(a) under Becker and Schlumberger.

⁴ See *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Patent Office).

FF1. Nelson discloses a real-time notification system for airline customers of changes in airline information which affects their travel plans (Abstract) such as flight delays or cancellations (Col. 2:40-47) by e-mail or paging (Col. 1:64-66).

FF2. Nelson discloses that the system provides for notifying certain groups of customers such as frequent fliers or class of service (Abstract).

FF3. Nelson discloses polling of airline databases (Fig. 1) to determine what events require customer notification (Col. 5:6-13).

FF4. Nelson discloses that the flight manifests 143 are stored on the airline databases 130 and accessed by the customer message center 105 (Fig. 1).

FF5. Becker discloses a system for disseminating traveler information (Title, Abstract).

FF6. Becker discloses that the traveler information system notifies them according to criteria such information thresholds such as the total length of anticipated delays (Col. 4:66-Col. 5:7).

FF7. Schlumberger discloses a Frequent Traveler e*Assistant with on-demand flight information to deliver personalized flight information. (Abstract.)

FF8. Schlumberger discloses that when a subscriber books a flight on an airline that they will have the option of automatically receiving information such as alerts about flight delays or cancellations over their hand set (Abstract).

PRINCIPLES OF LAW

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). See also *KSR*, 550 U.S. at 407 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”)

In *KSR*, the Supreme Court emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art,” *Id.* at 415-16, and discussed circumstances in which a patent might be determined to be obvious. In particular, the Supreme Court emphasized that “the principles laid down in *Graham* reaffirmed the ‘functional approach’ of *Hotchkiss*, 11 How. 248.” *KSR*, 550 U.S. at 415, (citing *Graham*, 383 U.S. at 12 (emphasis added)), and reaffirmed principles based on its precedent that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” The Court also stated “[i]f a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability.” *Id.* at 417. The operative question in this “functional approach” is thus “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *Id.*

The Court noted that “[t]o facilitate review, this analysis should be made explicit.” *Id.* at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere

conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”). However, “the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.*

ANALYSIS

Claims 1-5, 14-19, 24, and 27

The Appellants argue that the rejection of claims 1 and 14 under 35 U.S.C. § 103(a) under Nelson, Becker, and Schlumberger is improper because the references would not be combined. The Appellants argue that Nelson is concerned with providing notification services on a preferential basis, and that Becker is concerned with providing travel conditions (weather, snow road, and construction) to a traveler (Br. 14). The Appellants also argue that neither Nelson or Becker teach pushing of flight status notification information to passengers if the updated time varies from the corresponding scheduled time by more than a predetermined amount (Br. 14). The Appellants further argue that Schlumberger does not disclose how alerts are generated or delivered or how the application would interface with a computerized flight reservation system (Br. 14).

In contrast the Examiner has determined that Nelson discloses a host computer that notifies passengers of changes in the status of airline flights (Ans. 26), that Becker discloses notification if the time of departure or arrival varies by a predetermined time (Ans. 27), and that Schlumberger discloses receiving the passenger reservation and giving the option to receive flight delay information at the time of booking (Ans. 28). The

Examiner has determined that it would have been obvious to combine these features of Nelson, Becker, and Schlumberger to provide a traveler with personalized travel information for travel conditions and to provide on-demand flight information (Ans. 28-30).

We agree with the Examiner. Nelson discloses a real-time notification system for airline customers for notification of changes in airline information which affects their travel plans such as flight delays or cancellations by e-mail or paging (FF1). Becker discloses a system for disseminating traveler information where the system notifies them according to criteria information thresholds such as the total length of anticipated delays (FF5, FF6). Schlumberger discloses an on-demand flight information system used to deliver personalized flight information (FF7). Schlumberger discloses that when a subscriber books a flight on an airline that they will have the option of automatically receiving information such as alerts about flight delays or cancellations over their hand set (FF8). The modification of the system of Nelson to include notifying passengers if the flight arrival or departure times varies by a predetermined amount as disclosed by Becker and to receive the passengers reservation information and request for flight status change notification when reserving the flight as disclosed by Schlumberger is an obvious and predictable use of prior art elements according to their established functions to easily allow airline passengers to receive necessary flight updates. It is improper to attack references individually where, as here, the obviousness rejection is based on their combined teachings. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986); *In re Keller*, 642 F.2d 413, 425-26 (CCPA 1981). For these reasons the rejection of claims 1 and 14 is sustained. The Appellants have not argued separately the rejection of dependent claims 2-5, 15-19, 24, and

27 and the rejection of these claims is accordingly sustained for the same reasons given above.

Claims 6-9, 20-21, and 25

With regards to claim 6 the Appellants argue additionally that Nelson fails to disclose the limitation for “receiving and storing in a database scheduled times of departure or arrival for substantially all U.S. airline flights departing or arriving within a certain time” (Br. 16). The Appellants argue that Nelson relies on the airlines database to access flight information and does not independently store flight data in a database (Br. 16).

The Examiner argues that the limitation for “receiving and storing in a database scheduled times of departure or arrival for substantially all U.S. airline flights departing or arriving within a certain time” is non-functional descriptive data (Ans. 38-39).

We agree with the Appellants. Here the claim limitation requires “*a code segment executed by the host computer for receiving and storing in a database scheduled times of departure or arrival for substantially all U.S. airline flights departing or arriving within a certain time.*” (Emphasis added.) Here the claim requires not only the raw data of the “scheduled times of departure or arrival for substantially all U.S. airline flights departing or arriving within a certain time” but also “*receiving and storing*” the data in a “*database.*” (Emphasis added.) In contrast, Nelson discloses that the information is accessed from the airline databases as opposed to stored there (FF4). As the references fail to disclose this limitation we will not sustain the rejection of claim 6. Claims 7-9, 20-21, and 25 depend from claim 6 and the rejection of these claims is not sustained for the same reasons given above.

Claims 10-13, 22-23, and 26

The Appellants argue that the rejection of claim 10 is improper because Becker fails to disclose “queuing the passenger reservation information to a date-ranged queue using the scheduled time of departure or arrival of the flight” (Br. 19). The Appellants also argue that Schlumberger fails to teach or suggest “receiving passenger reservation information...including a request for automatic flight status change notification information for an airline flight the passenger is reserving.”

The Examiner acknowledges that Becker fails to disclose that cited queuing limitation but has determined that queuing is well known in the art as a simple listing of items to be done for example in a print queue for a printer (Ans. 45). The Examiner states that it would have been obvious to one of ordinary skill in the art to modify the system of Becker to include queuing with respect to date for ease of processing since Becker discloses storing the reservations including the time of departure of flight.

We agree with the Examiner. First, Schlumberger discloses that when a subscriber books a flight on an airline that they will have the option of automatically receiving information such as alerts about flight delays or cancellations over their hand set (FF8). Second, the concept of queuing is clearly well known in the art as acknowledged by both the Appellants (Br. 20) and the Examiner (Ans. 47). The limitation in claim 10 referenced by the Appellants requires more than queuing and requires also “queuing the passenger reservation information to a date-ranged queue using the scheduled time of departure or arrival of the flight.” Here, there are a finite number of ways the reservation system could be queued such as alphabetically, by the date the reservation was made, or in date range queue based on the scheduled flight time. Modifying the prior art references to

have the queuing perform in a date-ranged queue based on the flight time would have been obvious to one of ordinary skill in the art to allow the passengers with flights departing soonest to be notified first of any delays. “When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.” *KSR, Id.* at 421. With regards to the Appellants’ arguments that there is no disclosure of how the elements of Becker and Schlumberger would be combined, one of ordinary skill in the art could readily combine the disclosed elements of Becker and Schlumberger into a combined system to provide notification of flight status changes.

For these reasons the rejection of claim 10 is sustained. The Appellants have not argued the rejection of claims 11-13, 22-23, and 26 separately and the rejection of these claims is sustained for the same reasons given above.

CONCLUSIONS OF LAW

We conclude that Appellants have failed to show that the Examiner erred in rejecting claims 1-5, 14-19, 24, and 27 under 35 U.S.C. § 103(a) under Nelson, Becker, and Schlumberger.

We conclude that Appellants have shown that the Examiner erred in rejecting claims 6-9, 20-21, and 25 under 35 U.S.C. § 103(a) under Nelson, Becker, and Schlumberger.

We conclude that Appellants have failed to show that the Examiner erred in rejecting claims 10-13, 22-23, and 26 under 35 U.S.C. § 103(a) under Becker, and Schlumberger.

DECISION

The Examiner's rejection of claims 1-5, 10-19, 22-24 and 26-27 is affirmed. The Examiner's rejection of claim 6-9, 20-21, and 25 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED-IN-PART

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